

## **Diabetes**

Almost everyone knows someone who has diabetes. An estimated 20.8 million people in the United States, 7 percent of the population, have diabetes, a serious, lifelong condition. Of those, 14.6 million have been diagnosed and 6.2 million have not yet been diagnosed.

Diabetes is a disorder of metabolism, the way our bodies use digested food for growth and energy. Most of the food we eat is broken down into glucose, the form of sugar in the blood. Glucose is the main source of fuel for the body.

After digestion, glucose passes into the bloodstream, where it is used by cells for growth and energy. For glucose to get into cells, insulin must be present. Insulin is a hormone produced by the pancreas, a large gland behind the stomach.

When we eat, the pancreas automatically produces the right amount of insulin to move glucose from blood into our cells. In people with diabetes, however, the pancreas either produces little or no insulin, or the cells do not respond appropriately to the insulin that is produced. Glucose builds up in the blood, overflows into the urine, and passes out of the body in the urine. Thus, the body loses its main source of fuel even though the blood contains large amounts of glucose.

There are different types of diabetes; Type 1 and Type 2 are the most common. There are only about five to ten percent of all diabetes cases that are Type 1. This type of diabetes is usually seen in at an early age, the person may be thin, and they have to use insulin in a shot. Most of the people with diabetes, ninety to ninety-five percent, have Type 2. Gestational diabetes is a third type, and it happens during pregnancy and goes away after the baby is born.

Diabetes is widely recognized as one of the leading causes of death and disability in the United States. Diabetes is associated with long-term complications that affect almost every part of the body. The disease often leads to blindness, heart and blood vessel disease, stroke, kidney failure, amputations, and nerve damage. Uncontrolled diabetes can complicate pregnancy, and birth defects are more common in babies born to women with diabetes.

Today, healthy eating, physical activity, and taking insulin are the basic therapies for type 1 diabetes. Healthy eating, physical activity, and blood glucose testing are the basic management tools for type 2 diabetes. In addition, many people with type 2 diabetes require oral medication, insulin, or both to control their blood glucose levels.